

Innovation, Organization and Strategic Alliance¹

Yoshifumi KONNO

Harumichi YOKOO

Hyunjong CHOO

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1. Introduction

In surveying the study on “competitive strategy theory” carried out up to recently, it is evident that the current of discussions changes from the “positioning approach” originated in Porter (1980) either to the “resource-based approach”, or to the “capability-based approach”, which pay attention to the core capability. Previous studies, however, have been overseeing “how to defeat the core rigidity” by paying too much attention to “how to enhance the core capability. This paper tries to discover, from the strategic and organizational point of view, the chance of how strategic alliance can contribute to defeating core rigidity, in relation to strategic alliance, by paying attention to the former.

2. Competitive Advantage and Core Capability

2.1 Competitive Advantage and Innovation

As everyone knows, it is from the early 1980s when the competitive theory appeared that the arguments on competitive advantage are really pursued. Porter (1980), based on the industrial organization theory, presents analysis tool of “Five Competitive Forces Analysis” and asserts that, in adopting competitive strategy, it is

Key Words : Innovation, Strategic Alliance, Competitive Advantage, Core Capability, Core Rigidity

very important to have interest in the structure and characteristics of the industry that its own company belongs to as well as competitors. Through this analysis tool, it is possible to acquire strategic advantageous position to evade competition, with both comprehending company's structural force systematically, and, at the same time, finding out favorable industry and giving effect to competitive force to turn out its company's advantage.

Originally, in Porter (1980), "how to establish competitive advantageous position, based on industry analysis" was discussed with the concept of three basic strategy, but there was none discussed with detail about the concept of competitive advantage. So, in Porter (1985), the concept of value chain was presented as an analysis tool to understand the origin of competitive advantage. According to Porter (1985), "Competitive advantage is at the heart of a firm's performance in competitive markets²" and "competitive advantage grows fundamentally out of value a firm is able to create for its buyers that exceeds the firm's cost of creating it³". More concretely, competitive advantage "stems from the many discrete activities a firm performs in designing, producing, marketing, delivering, and supporting its product⁴". In this concept, the most important point is to evaluate value chain as activity system of mutual dependence. That is because "competitive advantage frequently derives from linkages among activities just as it does from the individual activities themselves⁵". These linkages among activities bring competitive advantage through optimization and adjustment.

Porter (1985), however, defines innovation, which is one of the key words, as "Innovation can have important strategic implications for low tech as well as hi tech companies.⁶" Originally, the concept of innovation has been long discussed in economics, but Schumpeter (1926), often quoted relating innovation, comprehends the essence of capitalistic economy as dynamic process by industrialist's innovation. But, innovation in this case not only means technical innovation in the narrower sense. Innovation by Schumpeter (1926) means also "new combination of various things and abilities we can use". It specifically concludes the following cases. That is, ①new goods, ②new way of production, ③creation of new market, ④acquisition of new source of supply of ingredients and semi-processed goods, ⑤appearance of new organization⁷. The essence of innovation lies in giving stimulation to economy, breaking balance, by introducing new way of combination of means of production. The concept of innovation in this paper tries to have the broader sense with above meaning.

Company, creating innovation, is able to not only give changes to competition rule all over the company and acquire advantageous position to its own company, but also find out big chance of business by creating new market. Needless to point out, the main interest in company is to acquire competitive advantage by creating innovation and its sustainability of competitive advantage. But, in the arguments of Porter, which call acquisition of competitive advantage into account, this concept was not actively taken into consideration. That is because he concentrated on the comprehension of

structural characteristics, and he did give light attention to the process of creation of innovation. In Porter (1985), he clearly tries to comprehend competitive advantage and tech linked together, based on the concept of value chain analysis. Though this argument reviews role of tech in the value chain analysis, it just mentions the relationship of acquisition of competitive advantage and value action, called cost advantage and differentiation advantage. Also it did not actively mention the process of creation of innovation. And there were not any main discussion about the various forces of organization, or management of organization, which is deeply related this process.

2.2 Organizational Factors and Core Capability in the Process of Creation of Innovation

In early 1990s there were many discussions about the organizational forces in the process of creating innovation, which was not focused in 1980s when Porter was leading scholar. In this chapter, we would like to focus the study of Prahalad and Hamel (1990) which was the beginning of this argument.

In the background of Prahalad and Hamel (1990), there are Japanese companies' rapid progress, and regression of western companies which have managed business diversification under SBU (strategic business unit). On the basis of this background, western companies researched the origin of Japanese companies' competitive advantage from the point of organization management, using the concept of core competence. As shown in TABLE1: The Concepts of the Corporations SBU or Core Competence, management based on the concept of SBU used by previous western companies, understands that competitive base lies in simply competition between final commodities, but management based on the concept of core competence understands that companies' competitive advantage lies in the competitions among companies by raising competitiveness.

TABLE 1 : The Concepts of the Corporations SBU or Core Competence

	SBU	Core Competence
Basis for competition	Competitiveness of today's Products	Interfirm competition to build competencies
Corporate structure	Portfolio of businesses related in product market terms	Portfolio of competencies, core products, and business
Status of the business unit	Autonomy "is sacrosanct, the SBU "owns" all resources other than cash	SBU is a potential reservoir of core competence
Resource allocation	Discrete businesses are the unit of analysis, capital is allocated business by business	Businesses and competencies are the unit of analysis: top management allocates capital and talent
Value added of top management	Optimizing corporate returns through capital allocation trade-offs among businesses	Enunciating strategic architecture and building competencies to secure the future

【Prahalad and Hamel [1990], p.86.】

They say about the companies' competitive advantage that "In the short run, a company's competitiveness derives from the price/performance attributes or current products. But In the long run, competitiveness derives from an ability to build, at lower cost and more speedily than competitors, the core competencies that spawn unanticipated products. The real sources of advantage are to be found in management's ability to consolidate corporate wide technologies and production skills into competencies that empower individual businesses to adapt quickly to changing opportunities⁸". That is, the long-term competitive advantage is caused from innovation, and the organization management creation innovation is the source of companies' competitive advantage.

In this case, core competence is defined as "Core competencies are the collective learning in the organization, especially how to coordinate diverse production skills and integrate multiple streams of technologies." Furthermore, it is defined as "Core competence is communication, involvement, and a deep commitment to working across organizational boundaries."⁹ That is, core competence is adhesive to tie previous business and its characteristics, unlike the goods that disappear and become weak after use and with time, becomes strong after sharing. So it is possible to acquire sustainable competitive advantage. At the same time, core competence, with the meaning of organizational capability to integrate multiple managerial resources, is able to participate in various markets, and is non-material property difficult for other companies to imitate, and is able to be the resource of sustainable competitive advantage.

Afterwards, there are similar concepts to core competence which Prahalad and Hamel (1990) presented. Combinative Capability was presented by Kogut and Zander (1992) and Dynamic Capabilities by Teece, Pisano and Shuen. Among any of these researches, it is asserted that much importance be put on the core capability to integrate multiple activities of organization as a source of companies' competitive advantage.

3. Core Capability and Strategic Alliance

3.1 A Paradox of Core Capability

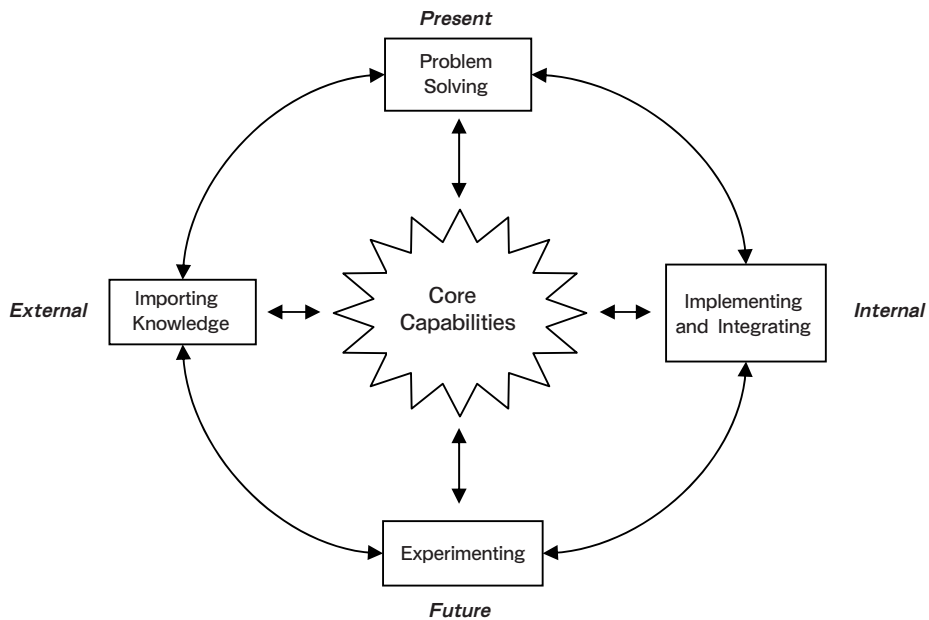
As prescribed before, nowadays the main stream is paying attention to the study of creating innovation from the point of Core Capability. In these studies it was important to pay attention to the organization forces or organizational process of enhancing Core Capability. However, there is another opinion that organizational process of enhancing Core Capability, at the same time, is liable to links into the enlargement of Core Rigidities. Among these studies, there is a pioneer work of Leonard-Barton (1998).

According to Leonard-Barton (1998), Core Rigidities, "is, as in the both faces of coin, like the same relationship with Core Capabilities, and so the Core Capabilities as

strong point turns into weak point.¹⁰” If there are same environmental conditions surrounding company, company is able to keep advantage by mutual dependence creating Core Capability. But if environment changes or system becomes meaningless routine work, it becomes rigid by losing advantage. Namely, Core Capability can be strong point and weak point at the same time. This brings us important implication that process of enhancing Core Capability could make the base of failure on the contrary. In this case, company should confront the base that brought company today’s success. It would be the first to ensure the process of enhancing Core Capability, to investigate.

Fist there are four processes of enhancing Core Capability: ①share of the creative solution of problem ②preparation and integration of new tech and tool ③formal and non-formal experiments ④introduction of new professional knowledge from the outside. (TABLE2: Knowledge-Inhibiting Activities)

TABLE 2 : Knowledge-Inhibiting Activities



【Leonard-Barton, D. [1998], p. 9.】

But the problem is that Core Rigidities become enlarged by the same processes of enhancing four Core Capabilities¹¹. Namely, the four processes of bringing enlargement of Core Rigidities are ①limited solution of problem ②lack of innovation capability by using new tool and way ③limited experiments ④ incomplete introduction of outside knowledge. Needless to point out, these four processes are essentially caused from the path-dependence. That is because, in any four learning cases of enhancing Core Rigidities, former decision-making or accident has a great influence, and works

through inertia. Besides, former decision-making or routine repertoire, having been done since past, not only limits the action of company's today and future, but also makes it difficult to enhance Core Capability in reaction to environmental changes. Moreover, this point of view is indicated with the expression of "Two-edged Sword" by Peteraf (1993)¹². But it is possible to say that though previous studies suggest risk relating to Core Rigidities, there are only a few studies that discuss vigorously.

As above, if the process of enhancing Core Capability enlarges Core Rigidities, clearly it is not enough to deal with by enhancing Core Capability within company on the premise of existing organizational context. So, to defeat Core Rigidities like this, it is necessary to give interest to outside of company. Possible one means is the use of strategic alliance. At next chapter, we would like to argue that problem.

3.2 Defeating Core Rigidity and Strategic Alliance

As we pointed out previously, it is necessary to introduce the outer point of view of company in defeating Core Rigidities and also enhancing Core Capability. In this paper, we suggest Strategic Alliance as one means. So, in this chapter, we would like to argue the characteristics of Strategic Alliance.

Generally, there are three means of acquiring company's outer resource and capability. Those are ①market transaction ②M&A, ③alliance between companies.

First, market dealing can find out the best suppliers through searching market and negotiation as necessary. The good point of this means is that if, once, we find out the best suppliers, it is possible to acquire managerial resource as quickly as possible, and if we cannot get expected achievements, it is possible to stop the dealing itself. But this process cannot communicate to the full, it has limit as a means to acquire more strategically important resource and capability.

Next, M&A has a good point to acquire resource capability quickly which its own company need. But if it fails, it has a great risk in investment. As the organizational culture of merged company is greatly different from that of its own company, the cost of regulation is very big.

Last, alliance between companies is the in-between means between market dealing and M&A. Concretely it denotes the loose relationships between organizations such as joint venture, affiliate company, distribution alliance, production alliance which more than two companies conclude cooperative contract relating to the specific tech or product or business. Company, by making alliance between companies, can have access to the strategically important resource which is not likely to transact in the open market, and share risk and investment cost with alliance partner.

As above, market dealing, unlike M&A or alliance between companies, has tendency to stay prior to normal resource capability. M&A have not only high risk of investment, but also problem of integrating organizational cultures. And alliance between companies, compared to market dealing or M&A, may have managerial

difficulties between partners, and inconsistency from loose relationship. But it may be understood that "how to manage" has a means to bring a great chance to each other. Namely, alliance between companies is the means to possess merits to fully cover demerits lying in itself.

After 1980s, it is possible to consider new characteristics about alliance between companies. In this paper, I would like to comprehend alliance between companies with following characteristics as strategic alliance¹³.

- ① It is formed between reciprocal competitive relationship between conglomerates.
- ② It intends to produce new product or tech.
- ③ Partners are equal in strength.
- ④ Partners cooperate not only in peripheral business but also core business with each other.

Though, in the case of strategic alliance above, there were many cases in order to evade risk or cut the cost, nowadays there are cases to create new innovation. In this sense, it can be said that strategic alliance nowadays is used as a means to actively have an influence on the environment, not counteracting passively to the inconsistent environmental changes.

Then, strategic alliance intends to create innovation with using resource and capability got from the partners. In other words, it is understood as a means to enhance core capability. Besides, the process that members, having met the culture and values of alliance partners, brings and distribute them is clearly understood as a process to defeat core rigidities. So, it is from the following reasoning that this paper tries to understand strategic alliance as a means to enhance core capability and defeat core rigidities.

Originally, it is not easy to have access to alliance partner's core capability by strategic alliance, and to distribute it actually within company. That is because core capability is multi-dimensional, and is not one which cannot be easily traded by market dealing or imitated. In other words, core capability is not only the element of hardware, but also that of software that integrate through company culture, executive's quality, employee's know-how, mutual action between employees, historical experience of company. This is unified, and merged with complication and is melted in company itself as organizational routine. So, the process that transfers alliance partner's core capability to within company is not only the element of hardware, but also the process of transferring the element of software. The element of software here has characteristics of slow moving, which is similar to the concept of Tacit Knowledge or Embedded Knowledge presented by Nonaka (1991) or Badaracco Jr. (1991). Core capability forms according as this element of software unites and melts with multiple elements of hardware. So, it is very difficult to acquire alliance partner's core capability through

strategic alliance. This learning process, directly or indirectly, may have an influence on the element of software in the company, especially the organizational routine.

From above, it is possible to define the process of learning core capability through strategic alliance as the introduction of alliance partner's proper organizational routine by meeting alliance partner's value and company culture. So it can be said that strategic alliance not only have an influence on the process of enhancing core capability, but also have another chance to defeat company's core rigidities by introducing new organizational routine.

4. Conclusion

The main stream of strategic management theory nowadays moves from the positioning approach presented by Porter (1980, 1985) who founded competitive strategy theory, to the resource-based approach or capability-based approach by Prahalad and Hamel (1990) which gives importance to managerial resource within company or capability. This argument pays attention to the question that how company should have such managerial resource or how company should enhance core capability to use it effectively. But it should not be overseen that the process of enhancing core capability has also the risk of enlarging core rigidities. Though previous studies pointed out this risk, it is not enough to say that good solution has been presented. So this paper paid attention to strategic alliance as a means to defeat core rigidities, and suggested its possibility to carry it out. However, this paper did not clarify by what kind of process strategic alliance defeats core rigidities. Next time, with this theme in focus, we would like to try to establish process model that can explain the relationship of strategic alliance and defeating core rigidities.

Hyunjong CHOO, Ph. D is Associate Visiting Scholar at the Faculty of Business and Commerce, Keio University.

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² Porter, M. E. [1985], p. xv.

³ Porter, M. E. [1985], p. 3.

⁴ Porter, M. E. [1985], p. 33.

⁵ Porter, M. E. [1985], p. 48.

⁶ Porter, M. E. [1985], p. 165.

⁷ Schumpeter, J. A. [1926], pp. 100-101.

⁸ Prahalad and Hamel [1990], p. 81.

- ⁹ Prahalad and Hamel [1990], p. 82.
- ¹⁰ Leonard-Barton, 1998, pp. 30-56.
- ¹¹ In detail, see the following study. Leonard-Barton, D. [1998], pp. 35-41.
- ¹² Peteraf, M. A. [1993], p. 184.
- ¹³ Konno [2002], p. 72.

References

- Badaracco Jr, J. L. [1991], *The Knowledge Link*, Harvard Business School Press.
- Barney, J. B. [1991], "Firm Resources and Sustained Competitive Advantage," *Journal of Management*, Vol.7.
- Barney, J. B. [2002], *Gaining and Sustaining Competitive Advantage*, 2nd ed., Prentice-Hall.
- Bartlett, C. A., Ghoshal, S. [1997], *The Individualized Corporation*, Harper Collins Publishers.
- Bleeke, J., Ernst, D. [1991], "The Way to Win in Cross-Border Alliances", *Harvard Business Review*, November-December.
- Choo, Hyunjong [2003], "The Framework of Strategic Learning", *Mita Business Review*, Vol.46.4.
- Crossan, M. M., Inkpen, A. C. [1995], "The Subtle Art of Learning through Alliances", *Business Quarterly*, Vol.60, No.2.
- Currall, S. C., Inkpen, A. C. [2002], "A Multilevel Approach to Trust in Joint Ventures", *Journal of International Business Studies*, Vol.33, No.3.
- Dodgson, D. [1993], "Learning, Trust, and Technological Collaboration", *Human Relations*, Vol.46, No.1.
- Dyer, J. H. [2000], *Collaborative Advantage: Winning through Extended Enterprise Supplier Network*, Oxford University Press.
- Dyer, J. H., Singh, H. [1998], "The Relational View: Cooperative Strategy and Sources of Interorganizational Competitive Advantage", *Academy of Management Review*, Vol.23, No.4.
- Fiol, C. A., Lyles, M. A. [1985], "Organizational Learning", *Academy of Management Review*, Vol.10, No.4.
- Grant, R. M. [1991], "The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation", *California Management Review*, Spring.
- Hamel, G. [1991], "Competetion For Competence and Inter-partner Learning Within International Strategic Alliances", *Strategic Management Journal*, Vol.12.
- Hamel, G., Prahalad, C. K. [1994], *Competing for the Future*, Havard Business School Press.
- Hamel, G., Doz, Y. L. [1997], "The Use of Alliance in Implementing Technology Strategies", *Managing Strategic Innovation and Change*, Oxford University Press.

- Hamel, G., Doz, Y. L. [1998], *Alliance Advantage*, Harvard Business School Press.
- Harbison, J. R., Pekar Jr, P.[1998], *Smart Alliance: A Practical Guide to Repeatable Success*, Jossey-Bass.
- Inkpen, A. C. [1996], “Creating Knowledge through Collaboration”, *California Management Review*, Vol.39, No.1.
- Inkpen, A. C. [2000], “Learning through Joint Venture: A Framework of Knowledge Acquisition”, *Journal of Management Studies*, Vol.37, No.7.
- Inkpen, A. C. [2005], “Learning through Alliances: General Motors and NUMMI”, *California Management Review*, Vol.47, No.4.
- Kale, P., Dyer, J. H., Singh, H. [2001], “Value Creation and Success in Strategic Alliances: Alliancing Skills and the Role of Alliance Structure and Systems”, *European Management Journal*, Vol.19, No.5.
- Kanter, R. M. [1994], “Collaborative Advantage”, *Harvard Business Review*, July-August.
- Kanter, R. M., Kao, J., Wiersema, F. [1997], *Innovation*, Harper Collins.
- Kogut, B., Zander, U. [1992], “Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology”, *Organization Science*, Vol.3, No.3
- Konno, Yoshifumi. [2006a], “Development of Management Strategy Theory and Sustainable Competitive Advantage, *Hokusei Review the School of Economics*, 46-1.
- Konno, Yoshifumi. [2006b], “Building and Rigidity of Organizational Capability- Examination of Organizational Capability and Strategic Alliances-”, *Japan Academy of Strategic Management*, No4.
- Lei, D., Slocum Jr, J. W. [1992], “Global Strategy, Competence-Building and Strategic Alliance”, *California Management Review*, Fall.
- Leonard-Barton, D. [1998], *Wellsprings of Knowledge*, Harvard Business School Press.
- Nonaka, I. [1991], “The Knowledge-Creating Company,” *Harvard Business Review*, November-December.
- Peteraf, M. A. [1993], “The Cornerstones of Competitive Advantage: A Resource-Based View”, *Strategic Management Journal*, Vol.14.
- Porter, M. E. [1980], *Competitive Strategy*, Free Press.
- Porter, M. E. [1985], *Competitive Advantage*, Free Press.
- Prahalad, C. K., Doz, Y., Hamel, G. [1989], “Collaborate with Your Competitors-and Win”, *Harvard Business Review*, June-February.
- Prahalad, C. K., Hamel, G. [1990], “The Core Competence of the Corporation”, *Harvard Business Review*, May-June.
- Schumpeter, J. A. [1926], *Theorie der Wirtschaftlichen Entwicklung*, Munchen und Leipzig.
- Simonin, B. L. [1999], “Ambiguity and The Process of Knowledge Transfer in Strategic Alliances”, *Strategic Management Journal*, Vol.20.

- Sogawa, Hirokuni [1991], *Kigyokaseishin to Keieisenryaku*, Moriyama Syoten.
- Sogawa, Sakakibara, Takahashi, Imaguchi, Sonoda [2006], *Innovation and Restructuring*, Keio University Publisher.
- Spekman, R. E., Forbes, T. M., Isabella, L. A., Macavoy, T. C. [1998], “Alliance Management: A View from The Past and A Look to The Future”, *Journal of Management Studies*, Vol.35, No.6, November.
- Spekman, R. E., Isabella, L. A., MacAvoy, T. C. [2000], *Alliance Competence: Maximizing the Value of Your Partnerships*, John Wiley & Sons.
- Teece, D. J., Pisano, G., Shuen, A. [1997], “Dynamic Capabilities and Strategic Management”, *Strategic Management Journal*, Vol.18, pp.509-533.
- Wernerfelt, B. [1984], “A Resource-Based View of the Firm,” *Strategic Management Journal*, Vol.5.
- Yokoo, Harumichi. [2006], “Innovative Corporate Culture and Organizational Learning”, *Hokusei Review the School of Economics*, 46-1.
- Yokoo, Harumichi. [2007], “A Formation of Innovative Corporate Culture and the Factors of Management: Quantitative Analysis of Survey Data from Domestic Manufacturing Industries”, *Hokusei Review the School of Economics*, 46-2.

[Abstract]

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In surveying studies on competitive strategy theory, it is evident that the current of discussions changes from the positioning approach originated by Michael E. Porter (1980) to either the resource-based approach, or to the capability-based approach, which pay attention to core capability. Previous studies, however, have overlooked how to defeat core rigidity by paying too much attention to how to enhance the core capability. This paper tries to discover ways in which strategic alliance can contribute to defeating core rigidity, in relation to innovation, organization and strategic alliance, by paying attention to the former.

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